A revolutionary multi PDP

Infinitely expandable multi PDP

Multi-PDP

Multi-PDP User's Manual

Thank you for your purchasing our Multi-PDP.
Please read through this user's manual for safety before installing this product.
This product is manufactured for Multi Plasma display model only.

Features of Multi-PDP

▶You can enjoy a wide full-flat screen with high brightness and high quality.

▶It is installable and movable anywhere thanks to its thin shape.

▶You can enjoy your favorite programs with various screen-split features simultaneously presenting several programs.

Thank you for your purchasing our Multi-PDP monitor.

This manual describes how to use the product and notes in use.
Please read the manual carefully before using it.
After reading the manual, keep it with the certificate for you to refer to it whenever you need.
If you have any question or any problem occurs, please contact to the provider or the A/S center immediately.

※Pausing static picture for around 3 hours may cause an afterimage effect.

Warning If you fail to comply with the regulations for safely and proper use, fire or injury may be caused.

Notice of users

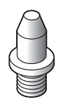
A-grade device

It is a device designed for business purpose with a safety certificate for electromagnetic interference, which user should be mindful of.

User's Manual

Multi-Screen Control System(MSCS)

Guide Pin(4pcs)



PC Cable

Power Cable

RS232 Cable

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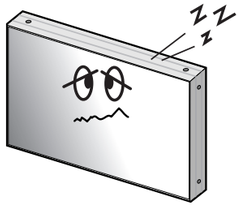
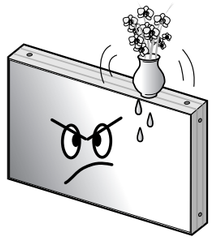
1. HOW TO KEEP SAFELY

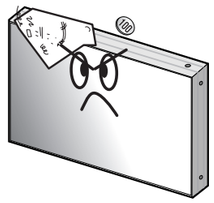
- If it operates abnormally, stop using it immediately.



- Do not place any liquid-containing container on it. If the inside is wet, it may cause electric shock or fire.

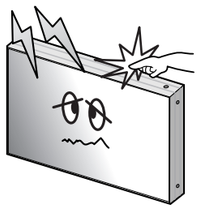


- Do not put any foreign material into the product. It may cause a failure or shorten the life span.

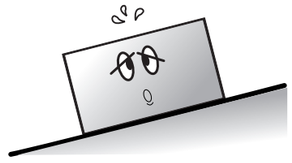


- Please refer to a specialized construction company for installing stand or wall mount unit. Otherwise, damage or injury may be caused.

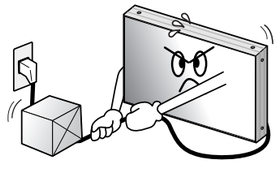
- Do not touch the device when lightning strikes. Otherwise, electric shock can be caused.



- Do not install it at unstable place. It may cause injury.

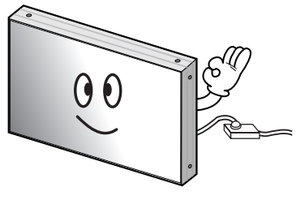


- Avoid any action to damage the power code or power plug. It may cause fire or electric shock.

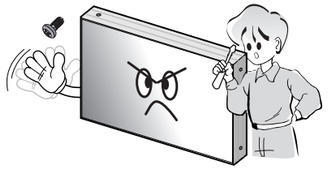


- Do not pull out the power plug with a wet hand. It may cause electric shock.

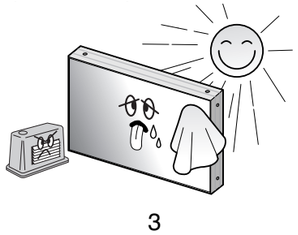
- Do not use exceeding ratings of outlet or extension cords. It may cause failure.



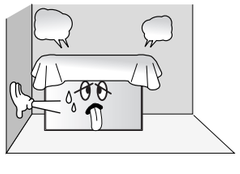
- Do not alter (or disassemble) the product. It may cause electric shock since high voltage is flowing inside.



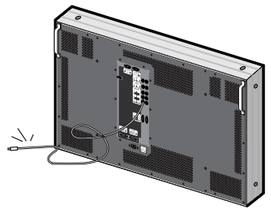
- Do not install the product at any place exposed to direct ray of light or near any heating device. It may shorten product's life span or cause failure.



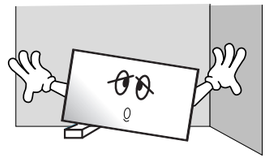
- Make sure the product is not covered with any object. If the venting hole is blocked, the inside temperature may rise to cause overheating resulting in fire.



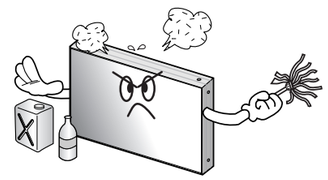
- Do not pull out or hang down the connection cable. It may damage the cord to cause fire or electric shock.



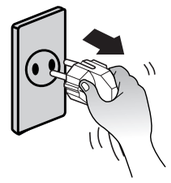
- Do not lean against the product or keep it leaned. It may cause injury or failure.



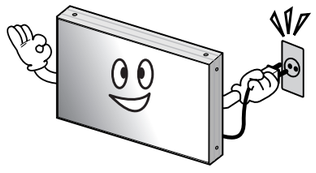
- Do not put it at any place with much humidity, dust, oil, smoke or steam. It may cause failure.



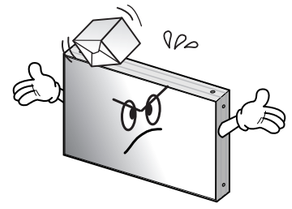
- Pull out the power plug by holding the plug. Otherwise, it may damage the power cord to cause fire or electric shock.



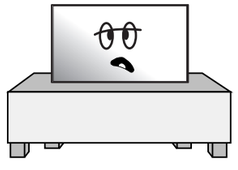
- If you do not want to use the product for a long time, keep the power plug unplugged to save the electricity.



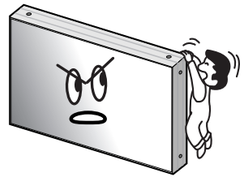
- Do not put any heavy object on it. It may cause failure.



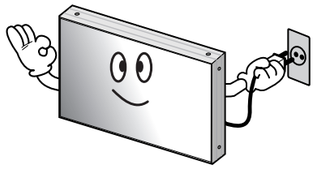
- Install the product on safe and flat surface.



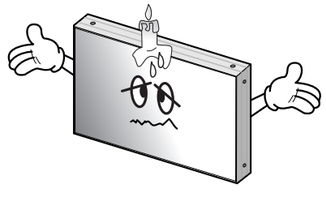
- Do not ride or step on the product It may cause breakage when fallen down.



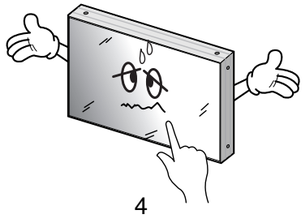
- When moving it, disconnect the connecting cable. Otherwise, it may damage the cable to cause fire or electric shock.



- Do not put candles on the product. If the liquid flows inside the product. It may cause electric shock or fire.



- Do not touch product's front surface with hand. Otherwise, the image quality can be lowered.

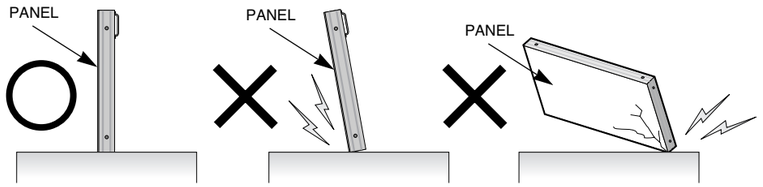


2. HOW TO INSTALL

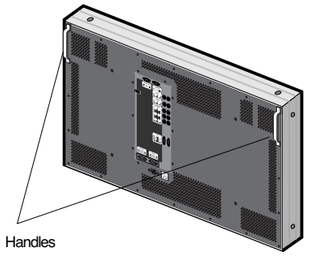
- The set is installable in diverse ways such as on a wall, or stand etc.
- Install this set only at a location where adequate ventilation is available.
- This set is designed to be mounted either horizontally or vertically.

Attention

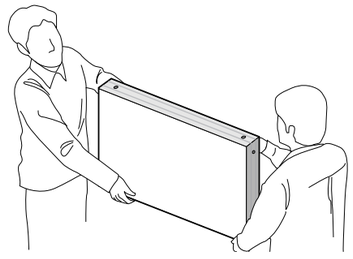
※Do not incline the panel forward.
The edge or bottom of the panel can be damaged.



How to move Multi-PDP (short distance)

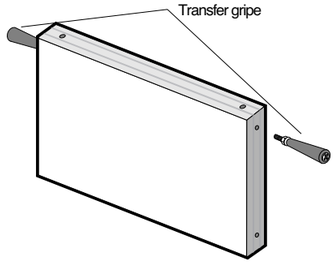


1. 2 people hold each handle on product's back side

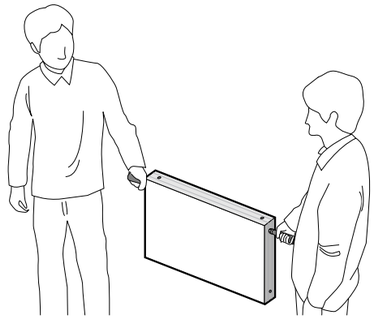


2. 2 people transfer the product with holding the handle and the front part at the same time.

How to move Multi-PDP (long distance)



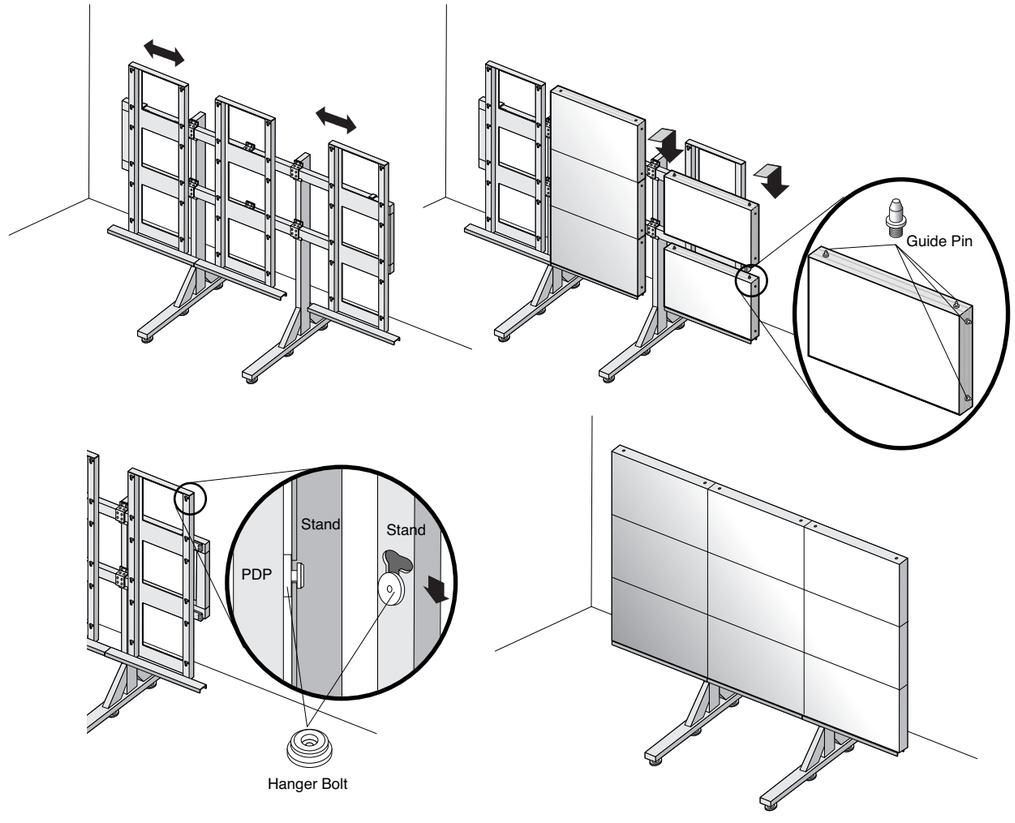
1. Attach the transfer gripe to each side of the product.



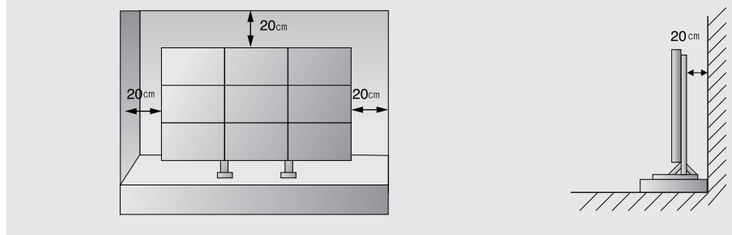
2. 2 people move the product with holding the gripe at the same time.

STAND TYPE (OPTIONAL)

- The set can be installed as shown below. (For further information, refer to the optional 'Stand Installation and Setup Guide'.)

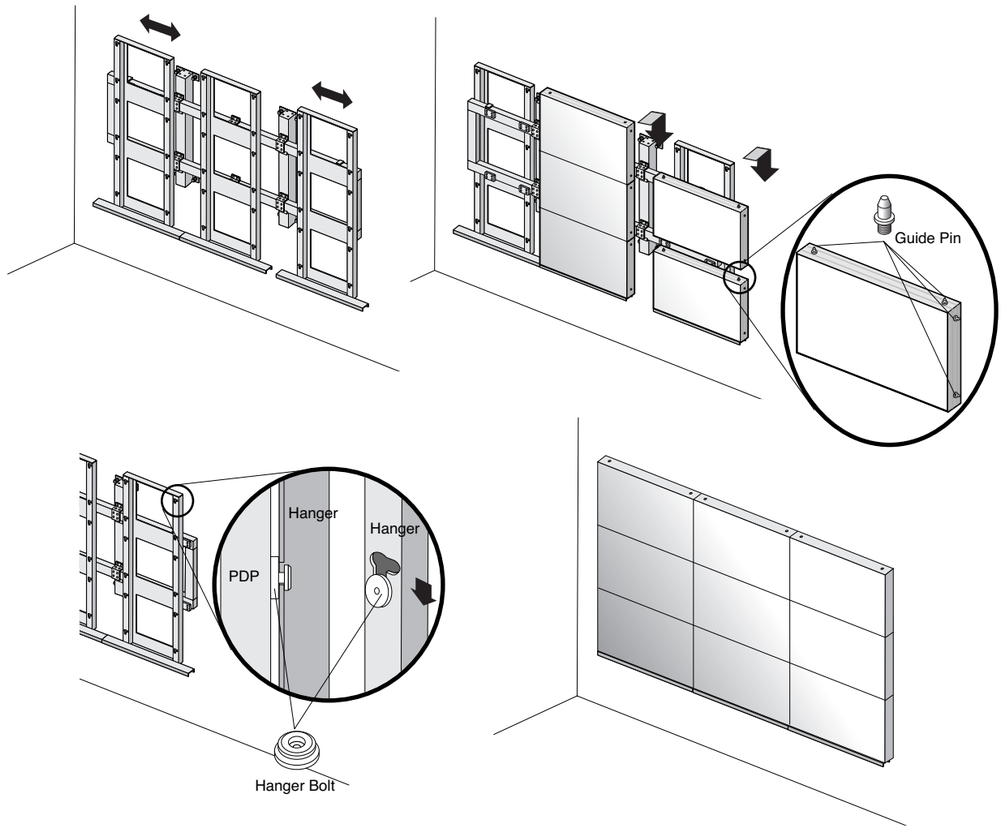


Install on a Stand
Pedestal mount allowing minimum clearance for adequate ventilation.

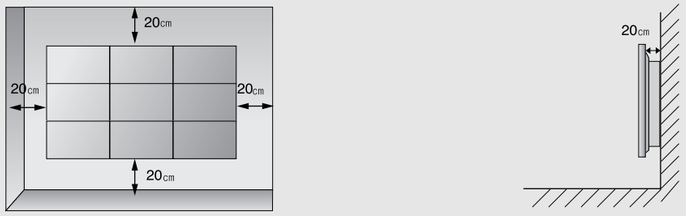


WALL TYPE (OPTIONAL)

• The set can be installed on the wall as shown below.
(For further information, refer to the optional 'Wall Mounting Bracket Installation and Setup Guide'.)



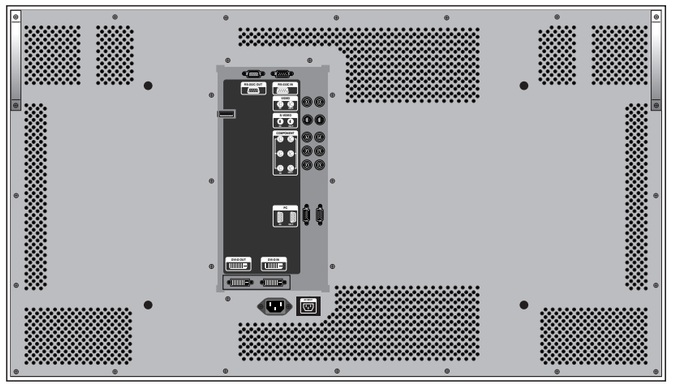
Mount on the wall
Wall mount allowing minimum clearance for adequate ventilation.



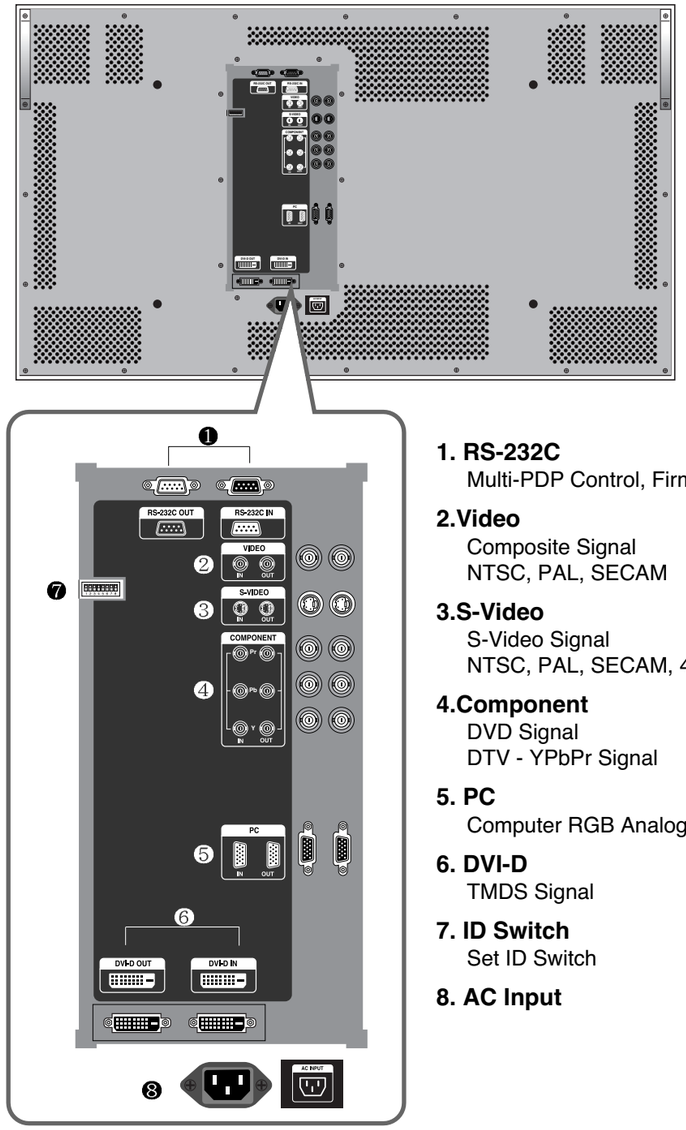
3. Guidance for Users

Front view

Back view



Input/Output Terminals



1. RS-232C
Multi-PDP Control, Firmware Upgrade, 9pin D-sub

2.Video
Composite Signal
NTSC, PAL, SECAM

3.S-Video
S-Video Signal
NTSC, PAL, SECAM, 4pin Mini Din

4.Component
DVD Signal
DTV - YPbPr Signal

5. PC
Computer RGB Analog Signal, D-sub 15pin

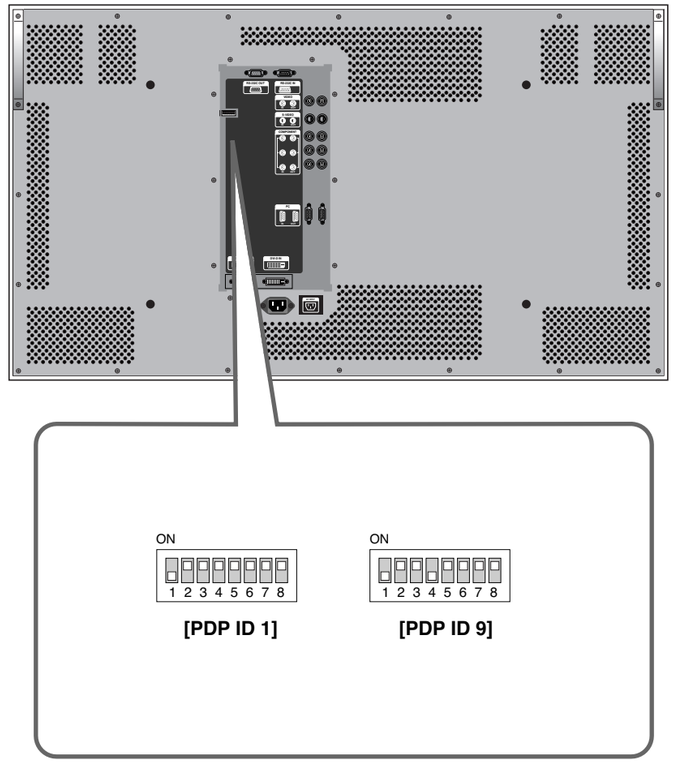
6. DVI-D
TMDS Signal

7. ID Switch
Set ID Switch

8. AC Input

Set ID Switch Setting

• Example of switch
- This is Dyadic System. In case of PDP set ID 1 and ID 9, set the ID switch as shown in the below figure

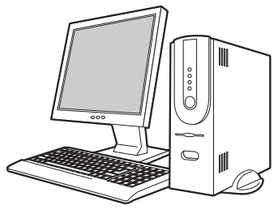


4. How to Connect Cables

4.1. Connection of one set multi-PDP

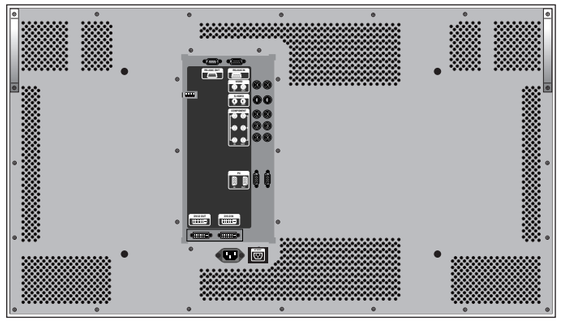
PC & DVI Connection

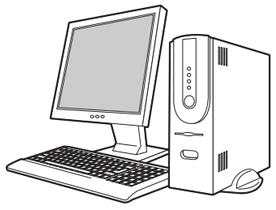
- MSCS (Multi-Screen Control System) that we supply and RS-232C of PDP monitor can control all functions of Multi-PDP, such as On/Off and screen control.
- To control Multi-PDP through PC, the Identity number of each Multi-PDP and that of MSCS should be identical.
- RS-232C of each Multi-PDP and PC should be connected.



PC (MSCS) to control Multi-PDP

RS-232C COM1

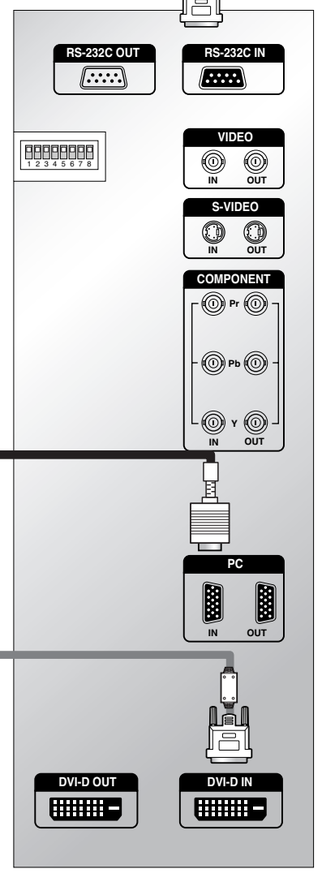




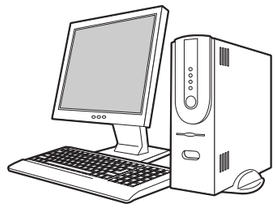
PC

When connecting to PC-ANALOG

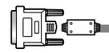
When connecting to DVI



VCR Connection



PC(MSCS) to control Multi-PDP

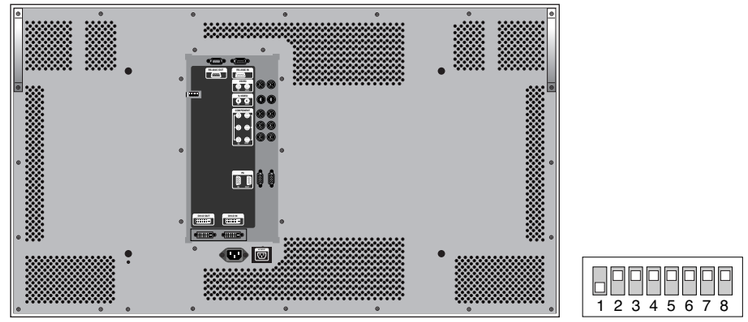


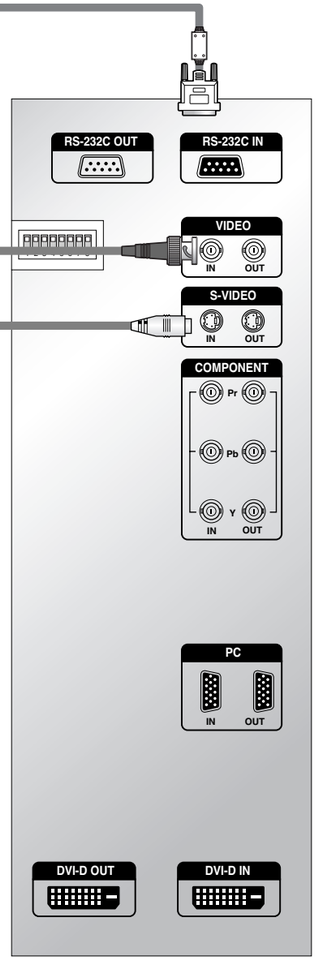
RS-232C COM1

When connecting to Video

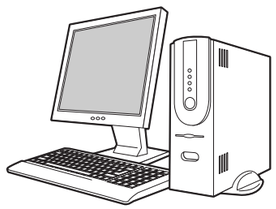
When connecting to S-Video

VCR



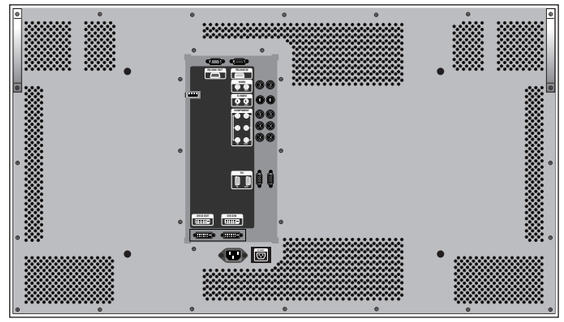


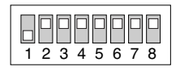
DVD & DTV Connection

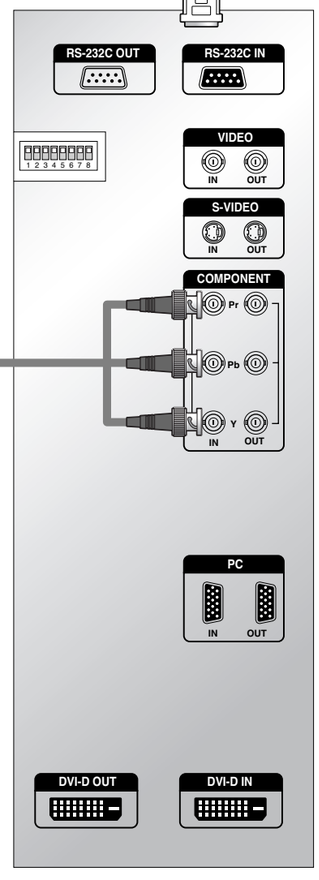


PC(MSCS) to control Multi-PDP

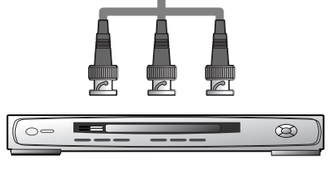
RS-232C COM1







When connecting to Component



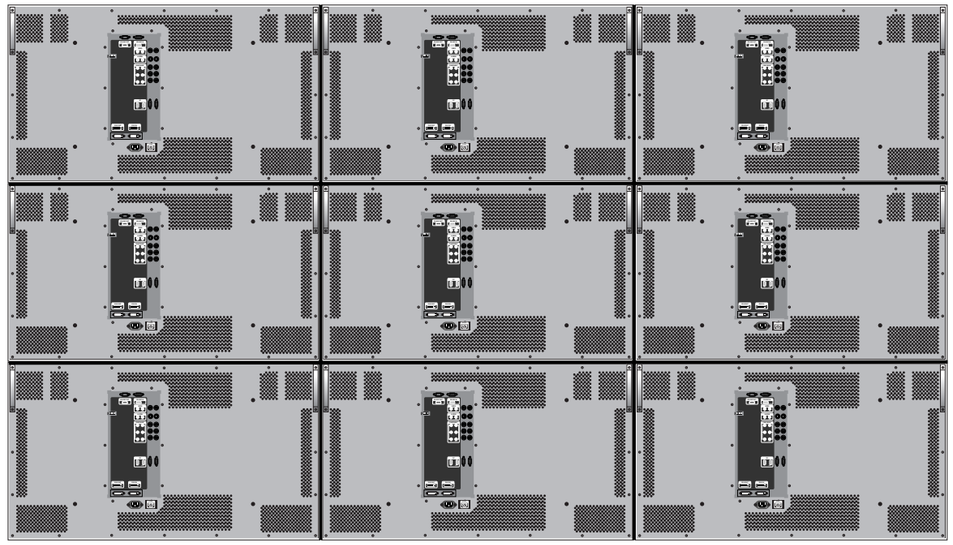
DVD & DTV

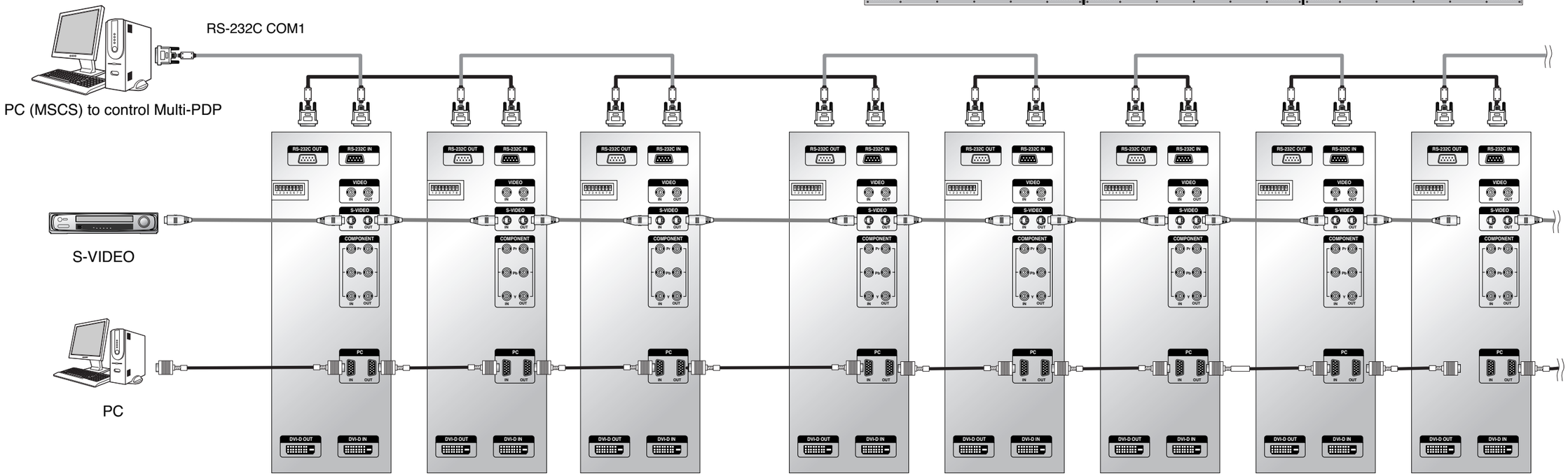
•Component Input ports
You can get better image quality by connecting DVD player to component input ports as below.

Component ports of the set	Y	Pb	Pr
Video output ports of DVD player	Y	Pb	Pr
	Y	B-Y	R-Y
	Y	Cb	Cr

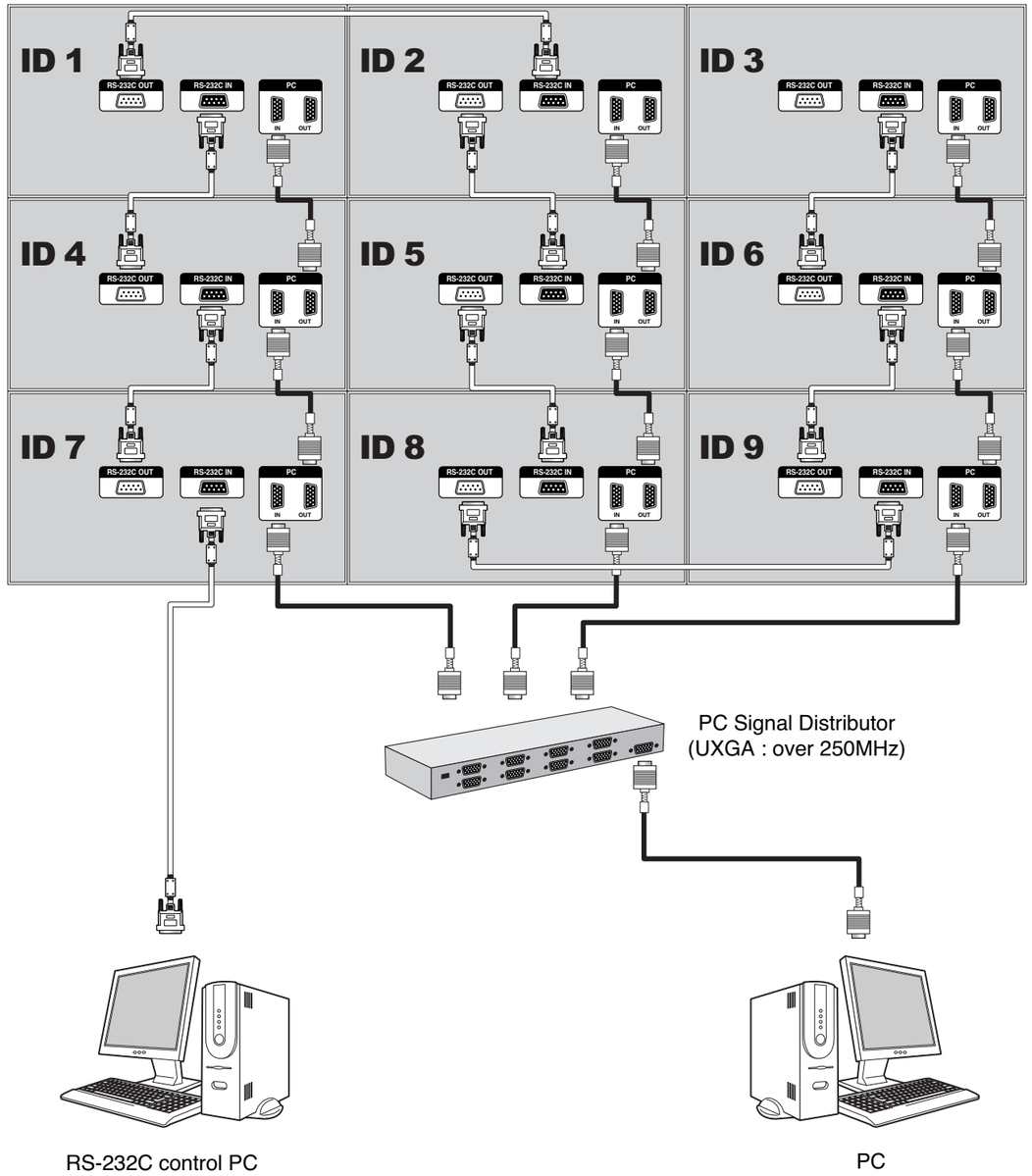
4.2. Connection of M x N Multi-PDP

- When connecting a number of Multi-PDP through Daisy Chain(Link), surrounding noise may come out to lower the image quality.
- In case of lower image quality, it is advisable to use a distributor that can provide resolution over UXGA (1600*1200 @ 60Hz).





4.3. Connection of 3 x 3 Multi-PDP

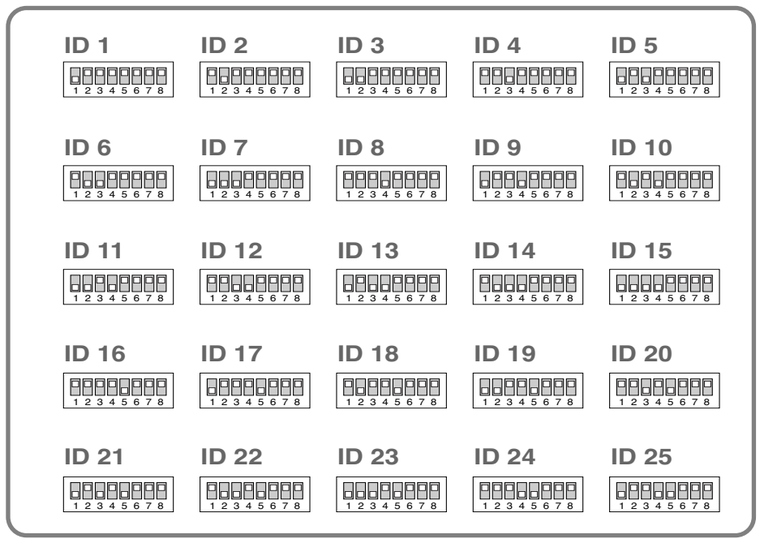


4.4. Setting ID of M x N Multi-PDP

- Identity number (ID) indicates the location of each Multi-PDP.
- When you look at the Multi-PDP screens in front of Multi-PDP.

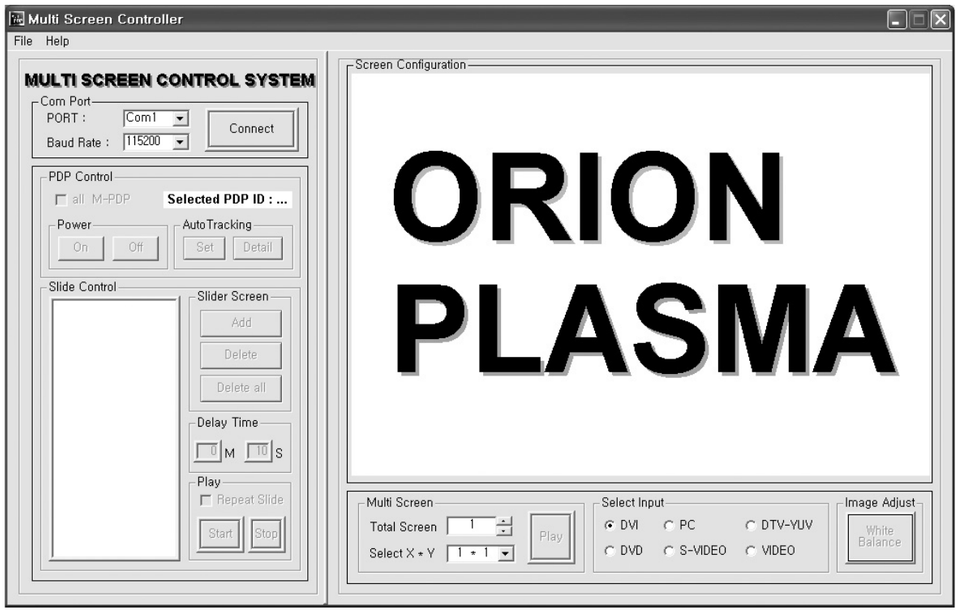
PDP ID 1	**PDP ID 2**	**PDP ID 3**	**PDP ID 4**	**PDP ID 5**
PDP ID 6	**PDP ID 7**	**PDP ID 8**	**PDP ID 9**	**PDP ID 10**
PDP ID 11	**PDP ID 12**	**PDP ID 13**	**PDP ID 14**	**PDP ID 15**
PDP ID 16	**PDP ID 17**	**PDP ID 18**	**PDP ID 19**	**PDP ID 20**
PDP ID 21	**PDP ID 22**	**PDP ID 23**	**PDP ID 24**	**PDP ID 25**

Recommended ID of M x N screens



5. Setting and operation of MSCS

• Activate MSCS.exe file.



MSCS (Multi-Screen Control System) Main Image

5.1 Set ‘Com Port’ for Communication

• Connect Multi-PDP RS-232C and PC Com Port

Com Port Setting

• Port is available from Com1 to Com5.

• Make sure that Baud Rate is set at 115200.

• When ‘PORT’ and ‘Baud Rate’ is set, click “Connect”.

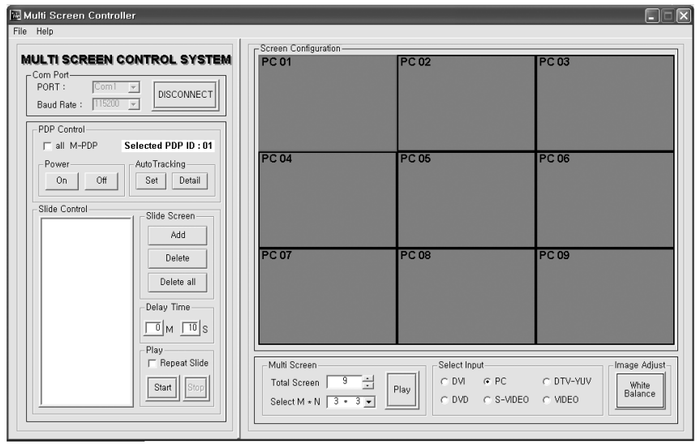
5.2 Set ‘Multi-Screen’

Set Multi Screen

1 Select total number of connected Multi-PDP sets.
-In case the number is 9, set the Total Screen at “9”.

2 Select an arrangement way in ‘Select M X N’
-Select a desirable arrangement way among 1*9, 3*3, and 9*1. (The arrangement way is displayed depending on the total number of connections.)

3 Select the Input Source, and press the Play button .
-Select a connected external Input Source, and press the ‘Play’ button.
-The overall screen is played on the selected external unit if pressing the “Play” button.

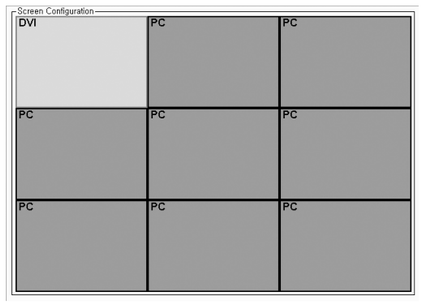


5.3 Configure diverse screens

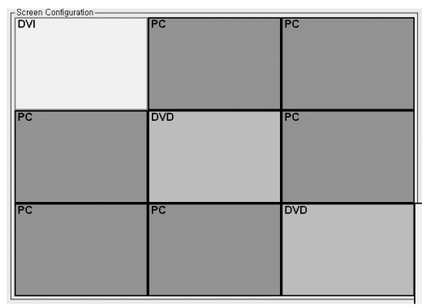
• You can configure diverse screens as you want.

1 Select a desirable Input Source in “Select Input”
Ex) Select “DVI” in “Select Input”

2 Click a desirable screen in ‘Screen Configuration’.
-Left-click a screen which should be converted to DVI.
-The screen you selected will be changed into DVI.



3 You can configure other screens in the same way.
-Selected screen will be displayed in DVD.

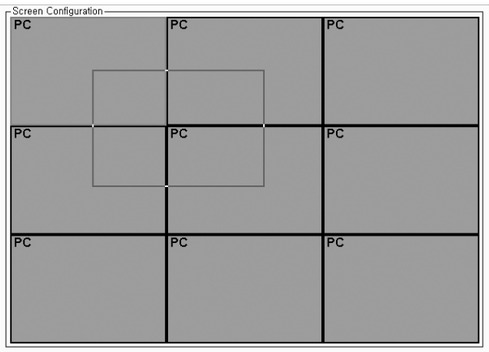


5.4 Set several screens at a time

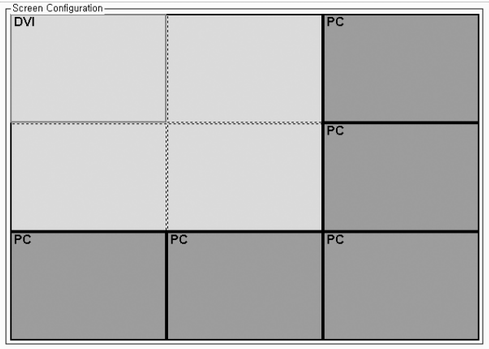
• You can configure diverse screens as you want.

1 Select a desirable Input Source in “Select input”.
-Select a desirable ‘DVI’ in “Select Input”

2 Click a desirable screen in “Screen Configuration”
-Left-click and drag on a start screen

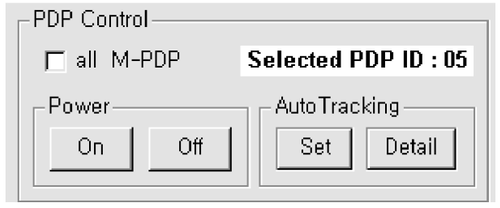


3 The screen is divided for display.
-The selected screen will be displayed in DVI.



5.5 Use “PDP Control”

• Transmit PDP Control Data to selected ID of M-PDP.
• If checking ‘all M-PDP” box, the Data will be sent to all connected M-PDP, disregarding PDP ID.



• Auto Tracking

If pressing the Auto Tracking Set button, the Input Source executes command only in PC.

-After operating Auto Tracking Set command, If alignment does not fit, give Auto Tracking Detail command to control Frequency, Phase, Line Start Pixel Start in detail.

Adjusting steps are as follows;
1) Adjust “Phase” until you can have clear vertical lines.
2) After adjusting “Phase”, adjust “Linestart” to fit vertical alignment, “Pixelstart” for horizontal alignment.
3) Adjust “Frequency”, if you still have wrong alignment.
If you adjust “Frequency”, repeat step 1) and 2) to fit alignment.

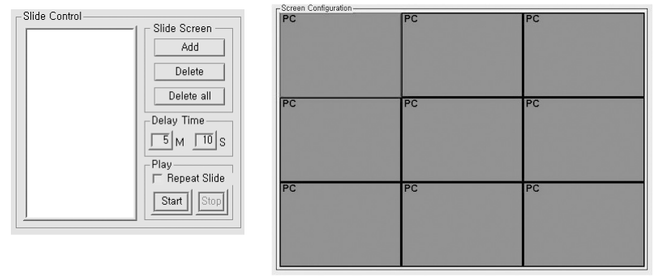
-The range where you can adjust is from -50 to 50.

• The Selected PDP ID indicates activated PDP ID in Screen Configuration (red rectangular area)

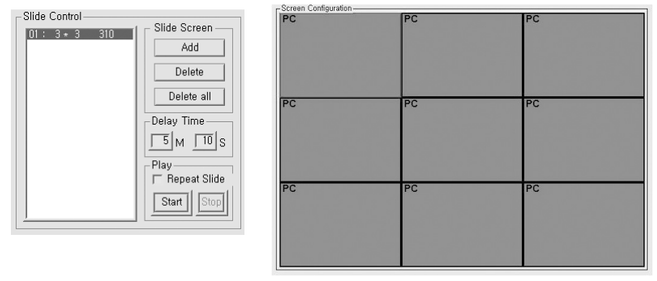
5.6 Slide Control

• Set the slide show list as you want. It can be repeated.

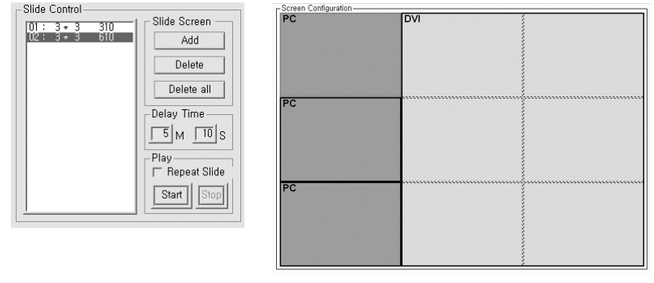
1 Select a desirable screen arrangement in Screen Configurations.
-Select a desirable screen arrangement and input source.



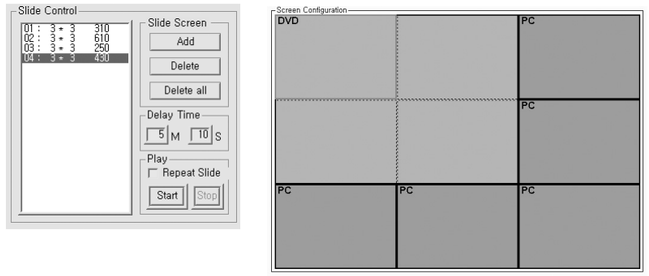
2 Input playing time in Slide Control.
-Input display time and save the data by pressing the Add button.



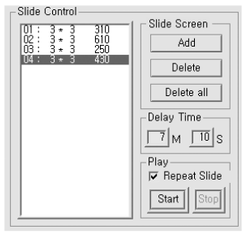
3 Save diverse screen arrangements in the same way.
-Set diverse types of display screen.



4 Press the Start button to display the saved screen.
-When pressing the Start button, the saved screen arrangement is automatically displayed for preset time.



5 When checking the Repeat Slide box, the display is repeated unless pressing the Stop button.



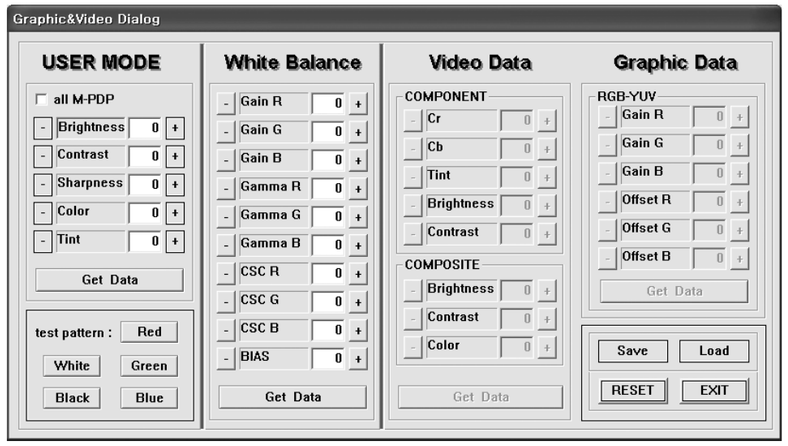
6 Press the Stop button to discontinue the Slide.

- Delete: Select a Slideshow that you want to delete and click Delete.
- Delete ALL: Delete all slide shows.
- Delay Time: Time gap between slide shows.
  -The time gap is selectable from 10 seconds to 59 minutes and 59 seconds

5.7 Image Adjustment - Graphics & Video

1 Select a Input source for image adjustment.
-Select a PC to control PC screen.
-Click the White Balance button.

2 Graphic & Video Dialog is displayed.
-You can adjust the image on the below screen.



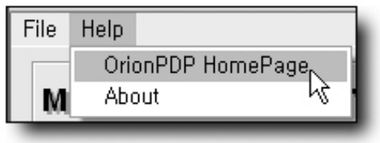
3 Press the Reset button to initialize all Image Adjustment values.

- All M-PDP command is executable only in the User Mode and Test Pattern.
- Press the Red, White, Green, Black or Blue button to activate the Test Pattern as an internal pattern.
- Press the Black button to end the internal pattern. The test pattern is activated as preset, even after powering off and on again.

- You can save adjusted values in each mode into the hard disk by pressing the Save button. In case data is deleted by mistake during adjustment, you can call up the saved file by pressing the Lode button.

5.8 Orion PDP HOME PAGE

• If you are in connection with the Internet, you can reach our URL clicking Help and Orion PDP Home Page.

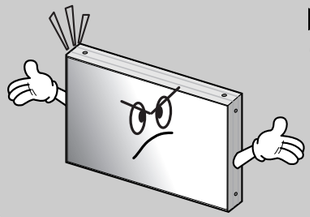


Orion PDP HOME PAGE

6. Other tips

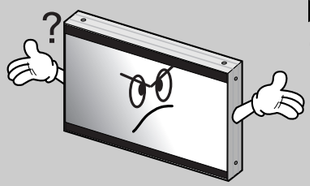
6.1 Before considering as a failure

Before calling for any repair, check the following and then refer to a near A/S center.



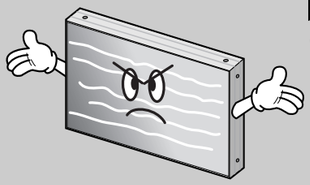
▶"Tick" sound from the main body.

• If there is no problem with the screen or sound, the "tick" sound is likely to result from the cabinet lightly shrinking with the change of room temperature. The sound does not affect product's performance.



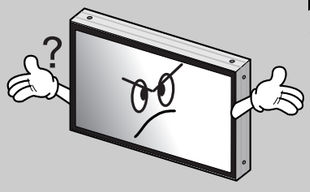
▶No image at upper and bottom part of the screen.

• As for a screen which is over 16:9 in width (such as cinema-sized one), no image may be displayed at upper and bottom part of the screen.



▶Speckles or white lines on the screen

• Check whether the problem is caused by vehicle, streetcar, high-voltage cable or neon sign, which emitting interference wave or electromagnetic induction. Avoid any interfering object.

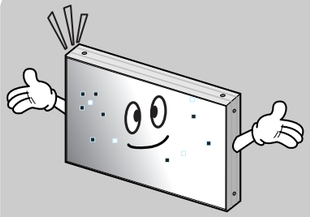


▶Screen size can be changed.

• The screen size may be fitted to the first dark scene depending on contents.

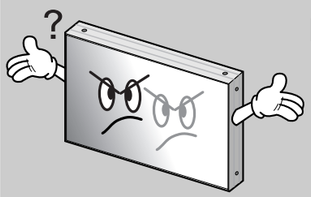
6.2 About Plasma display panel

The followings are phenomena caused by characteristics of the plasma display panel.
Since it is not any failure, you may use it at rest.



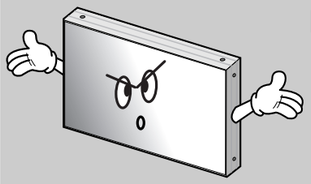
▶Black or twinkling spots on the screen

- Although the plasma display panel is manufactured with high-precision technology, there may exist black or twinkling spots on the screen. Since it is not any failure, you may use it at rest.



▶Afterimage

- When you keep static image still for around 3 hours, an afterimage may occur. In this case, the afterimage can be slowly removed when operating the screen with full white test pattern.(refer to page 28)



▶Noise from the inside

- When you turn on the product, driving sound may be heard from the display panel. Since it is not any failure, you may use it at rest.

7. Resolution of PC video signal

7.1 DVD/DTV

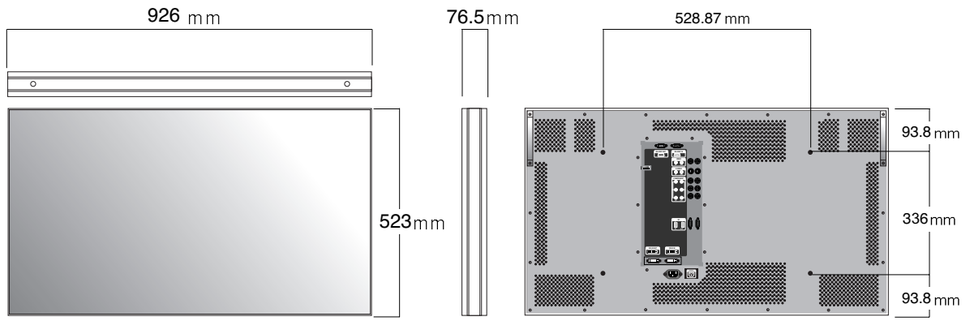
	Resolution	Aspect Ratio
480i	720 x 480	16:9
480p	720 x 480	16:9
576i	720 x 576	16:9
720p	1280 x 720	16:9
1080i	1920 x 1080	16:9

7.2 PC & DVI

Resolution	V-Freq. (Hz)	H-Freq. (KHz)	Remarks
640x350	85	37.86	
640 x 480	60	31.47	
	72	37.86	
	75	37.50	
	85	43.27	
800 x 600	56	35.16	
	60	37.88	
	72	48.08	
	75	46.88	
	85	53.67	
1024 x 768	60	48.36	
	70	56.48	
	75	60.03	
	85	68.68	
1152 x 864	75	67.50	
1280 x 960	60	60.00	
1280 x 1024	60	63.98	
1600 x 1200	60	75.00	

8. Specifications

Product name		MIS-4201	
Power supply		100 ~ 240V AC. 50/60Hz	
Power consumption			
	Max	400W	
Plasma display panel		42inch, 16:9 aspect ratio	
	Contrast ratio	3,000 :1 (Dark room)	
	Brightness	1,000 cd/m² (w/o Film)	
Front filter		Low reflection coating film	
Number of pixels		853W X 480H Pixels	
Seam gap (In case of multi formation)		5mm	
Environmental condition			
	Temperature	0°C~ 35°C	
	Humidity	20% ~ 70%	
Signal			
	Video signal	NTSC, PAL, SECAM,	
	PC signal	VGA, SVG A, XGA, SXGA, UXGA	
	Frequency	Horizontal Frequency 15.5 ~75kHz Vertical Frequency 50~ 75Hz	
Connectors		Input	Output
	Video	CVBS : BNC S-Video : DIN 4pin	Same as left side
	Component	Y, Pb, Pr : BNC	
	PC	PC RGB : D-Sub 15pin	
	DVI	TMDS : DVI-D 24pin	
	Serial	RS-232C D-sub 9pin(female)	RS-232C D-sub 9pin (male)
Option		Stand, Wall Mounting Bracket , Signal Cable	
External dimension		926mm[W] X 523mm[H] X76.5mm[D]	



Weight	27 kg

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